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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,559	01/26/2007	Franck Marandon	289351US0PCT	8180

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

WIESE, NOAH S

ART UNIT	PAPER NUMBER
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1793

NOTIFICATION DATE	DELIVERY MODE
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08/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/577,559	Applicant(s) MARANDON, FRANCK	
	Examiner NOAH S. WIESE	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

1. The claims 1-21 are pending and presented for the examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been received.

Information Disclosure Statement (IDS)

3. The information disclosure statements (IDS) were submitted on 04/28/2006 and 12/21/2006. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner. Please refer to applicant's copy of the 1449 herewith.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5-7, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Forker, Jr. et al (US 4483700).

Regarding **claims 1, 5, and 7**, Forker, Jr. et al (hereinafter "Forker") teaches a chemically strengthened glass that contains Na⁺ and/or K⁺ ions (see Abstract). The ions

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are present in a gradient over exchange depths greater than 100 μm (see Table 1, wherein DOL [depth of layer] of 10.7 mils is equivalent to 271.78 μm). The surface compression (surface stress of these samples is at least 30.5 kg/mm^2 (299.1 MPa). The chemically strengthened glasses of Table 1 are prepared using a starting glass having a strain point of 581°C (see column 5, lines 50-51). Thus, all of the limitations of instant claims 1, 5, and 7 are met by the Forker glasses, and the claims are anticipated by the prior art.

Regarding **claim 6**, as discussed above, the Forker glasses contain Na^+ and/or K^+ ions.

Regarding **claims 9-10**, Forker teaches that the alkali ion-containing glasses are made into panels (panes) having thicknesses of 0.085" and 0.105" (see Table 1). These thicknesses are equivalent to 2.159 mm and 2.667 mm.

1. Claims 2-4 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Forker, Jr. et al (US 4483700).

Regarding **claims 2-4**, as discussed above, Forker teaches chemically strengthened glasses meeting the compositional and property limitations of instant claims 1 and 5-6. Forker does not specify the interdiffusion coefficients of the glasses at 400°C and 490°C. However, because the Forker glasses are compositionally and structurally equivalent to the glasses of claims 2-4, and because they have equivalent strain points (which are compositionally dependent properties in much the same way as interdiffusion coefficients), the glasses would inherently have interdiffusion coefficients

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at the two temperatures that would meet the limitations of the claims. Thus, all of the limitations of instant claims 2-4 are met by the teachings of Forker.

Regarding **claim 8**, Forker does not teach the inventive glasses' compliance with EN 60335-2-6. However, as discussed above, the Forker glasses are compositionally and structurally equivalent to the glasses of claim 8 and have equivalent properties. Thus, the Forker glasses would inherently meet the standard of claim 8, and all of the limitations of the claim are met by the teachings of Forker.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Forker, Jr. et al (US 4483700).

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Regarding **claim 11**, the claim differs from Forker as applied above because no specific example is taught where the glass is made into a pane having a thickness of 2.8-5 mm. However, as also discussed above, thicknesses of 2.667 mm are taught. The thickness of a glass pane depends on its intended use and is thus a result effective variable. One of ordinary skill in the art would have known and understood techniques for making the Forker glasses into panes of a desired thickness, and would have had motivation for doing so from the need for a pane having a thickness between 2.8 and 5 mm. Thus, a pane having a thickness of 0.133 mm greater than the example taught by Forker would be obvious to one of ordinary skill from the Forker teachings. Claim 11 is therefore not patentably distinct over the prior art of record.

9. Claims 12, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forker, Jr. et al (US 4483700) in view of Craver (US 4817585).

Regarding **claims 12 and 16**, the claim differs from Forker as discussed above because Forker does not specify a use for the glass pane, and thus does not teach a door comprising said pane. However, it would have been obvious to one of ordinary skill in the art to modify Forker in view of Craver in order to use the Forker glass pane in a door for an oven because Craver teaches that panes in such doors are advantageously made from strengthened glass (see Abstract and column 5, lines 30-34). One would have been motivated to use the Forker glasses in such an application because doing so would provide a commercially viable use for the Forker glasses; Forker does not teach any specific applications for the glasses of the patent, thus motivating one to look elsewhere for uses of chemically strengthened glass panels. One

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would have expected reasonable success using the Forker glasses in an oven door because Craver specifically teaches that tempered glasses are preferred in said doors. Therefore, claims 12 and 16 are obvious and not patentably distinct over the prior art of record.

Regarding **claim 14**, Craver teaches that the border of the glass panel is lined with a sealing means (see column 5, line 23-25).

Regarding **claim 15**, Craver teaches that inventive door can be used on an oven for cooking, which is a cooker (see column 1, lines 8-15).

Regarding **claims 17-18**, Craver teaches that the oven of which the door is a part can be a wood burning stove, which is a pyrolytic oven.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Forker, Jr. et al (US 4483700) in view of Meyer (US 4207862).

Regarding **claim 13**, the claim differs from Forker as applied above because Forker does not specify a use for the inventive glass panels, and thus does not teach that the panels are used in a door comprising hinges directly incorporated into the panel. However, it would have been obvious to one of ordinary skill in the art to modify Forker in view of Meyer in order to use the Forker glass pane in a door having hinges directly incorporated therein because Meyer teaches that panes in such doors are advantageously made from strengthened glass (see Abstract and Figures 1 and 4). One would have been motivated to use the Forker glasses in such an application because doing so would provide a commercially viable use for the Forker glasses; Forker does not teach any specific applications for the glasses of the patent, thus motivating one to

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look elsewhere for uses of chemically strengthened glass panels. One would have expected reasonable success using the Forker glasses in a fireplace cooking range door because Meyer specifically teaches that tempered glasses are preferred in said doors. Therefore, claim 13 is obvious and not patentably distinct over the prior art of record.

11. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forker, Jr. et al (US 4483700) in view of Wilhoite (US 5471973).

Regarding **claims 19-21**, the claims differ from Forker as discussed above, because Forker does not teach that the inventive glass panes are used to separate two gaseous atmospheres at different temperatures. However, it would have been obvious to one of ordinary skill in the art to modify Forker in view of Wilhoite in order to use the Forker glass pane in a door for a fireplace because Wilhoite teaches that panes in such doors are advantageously made from strengthened glass (see column 3, lines 45-59 and Figure 5). Using the Forker panel in such a manner would constitute a method wherein two gaseous atmospheres of different temperatures were separated by the panel. The outside atmosphere would be approximately room temperature and Wilhoite teaches that the fireplace atmosphere's temperature is 575-600°F (301.7-315.6°C). One would have been motivated to use the Forker glasses in such an application, and thus a method meeting the instant claim limitations, because doing so would provide a commercially viable use for the Forker glasses; Forker does not teach any specific applications for the glasses of the patent, thus motivating one to look elsewhere for uses of chemically strengthened glass panels. One would have expected reasonable

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success using the Forker glasses in a fireplace door because Wilhoite specifically teaches that tempered glasses are preferred in said doors. Therefore, claims 19-21 are obvious and not patentably distinct over the prior art of record.

Conclusion

12. No claim is allowed.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Noah S. Wiese whose telephone number is 571-270-3596. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Noah Wiese
12 August, 2009
AU 1793

/Karl E Group/
Primary Examiner, Art Unit 1793